

## ABSTRACT

Disclosed is a device for object recognition used in an automotive passenger protection system. The device includes a signal source (10), adapted to generate at least one electromagnetic wave (12), and a receiver (14) that receives at least one electromagnetic wave (18) reflected by an obstacle (16). The device is provided with an evaluation unit (20) that is adapted to evaluate the polarization of the electromagnetic wave (18) reflected by the obstacle (16) and received by the receiver (14) and that generates at least one evaluation signal (22). The device allows for obtaining additional information on the obstacle such as its surface structure and can be used in automotive passenger protection systems.